

5 What is claimed is:

1. An aqueous, energy curable, printing ink composition comprising:
  - (i) a metallic colorant; and
  - (ii) an energy curable vehicle made of a homogenous, aqueous, composition  
10 of:
    - (a) water; (b) an ethylenically unsaturated oligomer; and (c) an ethylenically-unsaturated resin containing neutralized acidic or basic functional groups.
2. The composition according to Claim 1 further comprising a photoinitiator.  
15
3. The energy curable, aqueous, printing ink composition of Claim 1 wherein the amount of water is greater than 25 wt. %.
4. The energy curable, aqueous, printing ink composition of Claim 1 wherein the  
20 ethylenically unsaturated resin containing neutralized acidic or basic functional groups is less than 60 wt.%.- 5. The energy curable, aqueous, printing ink composition of Claim 4 wherein the amount of water is greater than 25 wt. %.  
25
- 6. An aqueous, energy curable, printing ink composition comprising:
  - (i) a metallic colorant;
  - (ii) an energy curable vehicle made of a homogeneous, aqueous, composition  
of: (a) water; and (b) an ethylenically unsaturated resin containing  
30 neutralized acidic or basic functional groups.
- 7. The composition according to Claim 5 further comprising a photoinitiator.
- 8. The composition of Claim 6 wherein the amount of water is greater than 26 wt.%.  
35
- 9. A method for printing using an energy curable, water resistant, printing ink comprising:
  - (i) applying to a substrate an energy curable composition having a

- 5 (a) metallic colorant ;  
(b) an energy curable liquid vehicle made of a homogenous, aqueous composition of ethylenically unsaturated oligomer; an ethylenically-unsaturated resin containing neutralized acidic or basic functional groups; and water,
- 10 (c) and optionally containing a photoinitiator; and  
(ii) subjecting the substrate to actinic radiation thereby forming an energy cured, water resistant, printed product.
10. The method of Claim 9 wherein the oligomer is a mixture of a partially water  
15 soluble oligomer and a water insoluble oligomer.
11. The method of Claim 9 wherein the water is greater than 25 wt.%.
12. The method of Claim 9 wherein the ethylenically unsaturated resin containing  
20 neutralized acidic or basic functional groups is less than 60 wt.%.
13. The method of Claim 12 wherein water is greater than 25 wt.%.
14. A method for printing using an energy curable, water resistant, printing ink  
25 comprising:  
(i) applying to a substrate an energy curable composition having a  
(a) metallic colorant ;  
(b) energy curable liquid vehicle made of a homogenous, aqueous, composition of ethylenically unsaturated resin containing  
30 neutralized acidic or basic functional groups; and water,  
(c) and optionally containing a photoinitiator; and  
(ii) subjecting the substrate to actinic radiation thereby forming an energy cured, water resistant, printed product.
- 35 15. The method of Claim 14 wherein the amount of water is greater than 26 wt.%.